WHAT IS CLAIMED IS;

1. A semiconductor device comprising

a circuit board,

a ferroelectric capacitor arranged on said circuit board、having a ferroelectric thin film and top and bottom electrodes which are formed so as to hold said ferroelectric thin film,

an insulating film formed on said circuit board so as to cover said ferroelectric capacitor,

a metallic wiring film formed on said insulating film so as to connect with either of said top and bottom electrodes, and

a surface protective film formed so as to cover said insulating film and said metallic wiring film, wherein

a synthetic stress working in a surface direction of the ferroelectric thin film of said ferroelectric capacitor is an extensional stress.

2. The semiconductor device according to claim 1, wherein

said insulting film, metallic wiring film, and surface protective film provide the surface-directional extensional stress of the ferroelectric thin film of said ferroelectric capacitor.

3. The semiconductor device according to claim 1 or 2, wherein

said metallic wiring film is constituted with two layers which are different kinds of metal.

4. A semiconductor device fabrication method for fabricating the semiconductor device according to claim 1 ; comprising the step of:

forming said insulating film on said ferroelectric capacitor by the TEOS-CVD method utilizing TEOS activated by O_3.

5. A semiconductor device fabrication method for fabricating the semiconductor device according to claim 2 ; comprising the step of:

forming said insulating film on said ferroelectric capacitor by the TEOS-CVD method utilizing TEOS activated by O_3.

6. A semiconductor device fabrication method for fabricating the semiconductor device according to claim 3 comprising the step of:

forming said insulating film on said ferroelectric capacitor by the TEOS-CVD method utilizing TEOS activated by O_3.

7. A semiconductor device fabrication method for fabricating the semiconductor device according to claim 1, wherein

said metallic wiring film is constituted with two layers where a bottom layer thereof is made of TiN, and

such step of heat-treating of said formed TiN layer in a temperature range of 200 to 650°C after forming said TiN layer is included.

8. A semiconductor device fabrication method for fabricating the semiconductor device according to claim 2, wherein

said metallic wiring film is constituted with two layers where a bottom layer thereof is made of TiN, and

such step of heat-treating of said formed TiN layer in a temperature range of 200 to 650°C after forming said TiN layer is included.

9. A semiconductor device fabrication method for fabricating the semiconductor device according to claim 3, wherein

said metallic wiring film is constituted with two layers where a bottom layer thereof is made of TiN, and

such step of heat-treating of said formed TiN layer in a temperature range of 200 to 650°C after forming said TiN layer is included.

10. A semiconductor device fabrication method for fabricating the semiconductor device according to claim 1, wherein

said metallic wiring film is constituted with two layers where a top layer thereof is made of Al, and

such step of forming said Al layer through the sputtering method while heating said circuit board in a temperature range of 100 to 400°C is included.

11. A semiconductor device fabrication method for fabricating the semiconductor device according to claim 2, wherein

said metallic wiring film is constituted with two layers where a top layer thereof is made of Al, and

such step of forming said Al layer through the sputtering method while heating said circuit board in a temperature range of 100 to 400°C is included.

12. A semiconductor device fabrication method for fabricating the semiconductor device according to claim 3, wherein

said metallic wiring film is constituted with two layers where a top layer thereof is made of Al, and

such step of forming said Al layer through the sputtering method while heating said circuit board in a temperature range of 100 to 400°C is included.

13. A semiconductor device fabrication method for fabricating the semiconductor device according to claim 1, wherein

said surface protective film is made of SiN, and

such step of forming said surface protective film by depositing SiN through the plasma-excitation CVD method having an RF power of 300 W or less is included.

14. A semiconductor device fabrication method for fabricating the semiconductor device according to claim 2, wherein

said surface protective film is made of SiN, and

such step of forming said surface protective film by depositing SiN through the plasma-excitation CVD method having an RF power of 300 W or less is included.

15. A semiconductor device fabrication method for fabricating the semiconductor device according to claim 3, wherein

said surface protective film is made of SiN, and

such step of forming said surface protective film by depositing SiN through the plasma-excitation CVD method having an RF power of 300 W or less is included.